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Charles K. Howard

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ROPES & GRAY LLP

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WRIGHT, JAMES B

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/824,681	Applicant(s) HOWARD ET AL.	
	Examiner J. Bradley Wright	Art Unit 3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "network 500" on page 17, line 12. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure. In particular, the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

3. The disclosure is objected to because of the following informalities: The description on page 12, lines 16-20 refers to peer 102 making a request to the payment processing system 106 by sending a message to peer 104 through peer 103. However, according to Figure 1A, the payment processing service 106 is available through peer 103. As such, the request from peer 102 would need to be directed to peer 103 through either peer 101 or 104. Therefore, using the language of the specification, peer 102 would be the PRP, peer 104 would be the MPP and peer 103 would be the PPP. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6, 14-17, 19-21 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sneed, et al. (European Patent Application No. EP 0 980 055 A1).

5. **Regarding claim 1**, Sneed discloses a payment processing method using a network of data processing peers (see Figures 1 and 2, and Abstract), including:

- a peer receiving a payment request from a user (Figure 2 and paragraph 0029);
- the peer dynamically selecting a suitable peer on the network to process the payment request (paragraphs 0016-0017 and 0031);

- the peer conveying user information and payment information to the selected peer (paragraphs 0016-0017 and 0031); and
- the selected peer attempting to debit an account associated with the user, based at least partially on the conveyed information (paragraphs 0031-0034).

6. **Regarding claim 2**, Sneed further discloses alerting the user about success or failure of the attempting by the selected peer (paragraphs 0031-0034).

7. **Regarding claim 3**, Sneed further discloses providing at least one of a good, a service, a privilege, and a right to the user if the attempting by the selected peer is successful (paragraphs 0032-0034).

8. **Regarding claim 6**, Sneed further discloses that the conveyed information is relayed to the selected peer by at least one message-passing peer belonging to the network (paragraphs 0016-0017 and 0031).

9. **Regarding claim 14**, Sneed further discloses that the selected peer includes an entry port where the payment request is received from the user (paragraphs 0016-0017 and 0031).

10. **Regarding claim 15**, Sneed further discloses that the attempting by the selected peer includes locating a payment processing service external to the network of the

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peers to execute a debit against an account associated with the user (paragraphs 0016-0017 and 0031).

11. **Regarding claim 16**, Sneed further discloses that the payment processing service includes an entity selected from the group consisting of: a credit card processing service, a bank, a financial transaction clearinghouse, and a combination thereof (paragraphs 0016-0017 and 0031).

12. **Regarding claim 17**, Sneed further discloses that at least one of the peers includes a parking meter (paragraph 0017).

13. **Regarding claim 19**, Sneed further discloses that a pair of the peers communicate via a wired link (Figure 1 and paragraphs 0016-0017).

14. **Regarding claim 20**, Sneed further discloses that a pair of the peers communicate via a wireless link (Figure 1 and paragraphs 0016-0017).

15. **Regarding claim 21**, Sneed further discloses that a pair of the peers communicate using a network security protocol (paragraph 0031).

16. **Regarding claim 24**, Sneed further discloses that the security protocol includes data encryption (paragraph 0031).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneed in view of Coutts, et al. (US Patent Application Publication No. 2002/0099634).

18. **Regarding claim 25**, Sneed discloses a payment processing method using a network of data processing peers (see Figures 1 and 2, and Abstract), including:

- a peer receiving a payment request from a user (Figure 2 and paragraph 0029);
- the peer dynamically selecting a suitable peer on the network to process the payment request (paragraphs 0016-0017 and 0031);
- the peer conveying user information and payment information to the selected peer (paragraphs 0016-0017 and 0031); and
- the selected peer attempting to debit an account associated with the user, based at least partially on the conveyed information (paragraphs 0031-0034).

However, Sneed does not explicitly disclose selecting a peer based at least partially on stored information about availability and service competency of the peers.

Coutts, in an analogous art, discloses a transaction processing system including individual devices can be linked on a peer-to-peer basis (see Abstract) wherein each peer creates and maintains a functional group registry containing a list of active peers and their functions (paragraphs 0129-0141) for the purpose of allowing the system to determine what peers are available in order to accurately reflect which services are available to the user (paragraph 0138). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the peers of Sneed to include functional group registries of active peers in order to accurately reflect which services are available to the user, as taught by Coutts.

19. **Regarding claim 27**, Coutts further discloses that the stored information is updated to reflect an addition of a peer to the network (paragraphs 0133-0142).

20. **Regarding claim 28**, Coutts further discloses that the stored information is updated to reflect a deletion of a peer from the network (paragraphs 0133-0142).

21. Claims 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneed in view of Odinotski, et al. (US Patent Application Publication No. 2004/0181496).

22. **Regarding claims 4**, Sneed teaches the limitations of claim 1, as discussed above. However, Sneed does not explicitly disclose the selected peer reporting at least a portion of the conveyed information and information about success or failure of the

attempting by the selected peer to a monitoring peer on the network. Odinotski, in an analogous art, discloses a networked metered parking system including a plurality of standalones (see Abstract) wherein parking related data is transmitted to and stored on at least one other standalone in a mirroring process to provide a distributed database of information, for the purpose of providing a more robust and resilient database (Figures 7 and 8, and paragraphs 0034-0036). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sneed to report transaction data to several peers for the purpose of providing a more robust and resilient database, as taught by Odinotski.

23. **Regarding claim 5**, Odinotski further discloses that the monitoring peer storing the reported information at a data storage repository. In particular, Odinotski discloses that a central management station may also compile data from all the standalones (Figure 9 and paragraphs 0065-0072).

24. **Regarding claim 7**, Odinotski further discloses dynamically selecting is based on a set of at least one criterion including a metric selected from the group consisting of: route length, route latency, data transmission speed, peer availability, cost overhead associated with a peer, and a combination thereof (paragraphs 0078-0082).

25. Claims 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneed in view of Coutts and further in view of Odinotski.

26. **Regarding claim 26**, the combination of Sneed and Coutts teaches the limitations of claim 25, as discussed above. However, Sneed does not explicitly disclose that the stored information is updated upon a payment request being responded to by the selected peer. As discussed above, Odinotski, in an analogous art, discloses a networked metered parking system including a plurality of standalones (see Abstract) wherein parking related data is stored on the standalone before being transmitted to and stored on at least one other standalone in a mirroring process to provide a distributed database of information, for the purpose of providing a more robust and resilient database (Figures 7 and 8, and paragraphs 0034-0036). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sneed to report transaction data to several peers for the purpose of providing a more robust and resilient database, as taught by Odinotski.

The Examiner notes that language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation, for example, statements of intended use. In particular, the limitation directed to “the updated information to be employed by the peer for a future payment request” simply reflects an intended use of the information.

27. **Regarding claim 29**, Sneed does not explicitly disclose the peer broadcasting the updated information to at least one other peer on the network. As discussed above, Odinotski, in an analogous art, discloses a networked metered parking system including a plurality of standalones (see Abstract) wherein parking related data is transmitted to and stored on at least one other standalone in a mirroring process to provide a

distributed database of information, for the purpose of providing a more robust and resilient database (Figures 7 and 8, and paragraphs 0034-0036). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sneed to report transaction data to several peers for the purpose of providing a more robust and resilient database, as taught by Odinotski.

28. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneed, in view of Pouyoul, et al. (US Patent No. 7,165,107) and Official Notice.

29. **Regarding claim 8**, Sneed teaches the limitations of claim 1, as discussed above. However, Sneed does not explicitly disclose pinging a peer on the network to request a payment processing service. Pouyoul, in an analogous art, teaches a system for dynamic, transparent migration of services in a peer-to-peer networking environment (see Abstract) in which peers can send a ping message to other peers for the purpose of checking if a peer is alive and/or to get information about the services the peer are able to provide (column 43, lines 1-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sneed to ping its credit validation server in order to ensure its availability and functionality, as taught by Pouyoul.

30. **Regarding claim 9**, as discussed above, Pouyoul teaches that it would have been obvious to include a pinging process in Sneed. The Examiner takes Official Notice it was old and well-known in the art that in response to a request for payment

processing services, the peer receiving the request, would determine whether a record exists of a prior request by the user, for example, whether the user has a valid financial account with the identified financial institution. The purpose of such a determination would be to ensure that the peer receiving the request is able to process the request for the user and prevent wasteful use of resources. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for a peer receiving such a request in Sneed to determine whether the user has a valid financial account with the identified financial institution in order to ensure that the peer receiving the request is able to process the request for the user and prevent wasteful use of resources, as is old and well-known.

31. **Regarding claim 10**, as discussed above, Pouyoul teaches that it would have been obvious to include a pinging process in Sneed. Sneed further discloses that a peer receiving a request for payment processing services determines whether a characteristic of the record is sufficient for the pinged peer to authorize the payment request. Namely, the system processing the payment in Sneed determines whether the user's credit card is approved (paragraphs 0031-0034), for the purpose of preventing fraud and ensuring a valid transaction.

32. **Regarding claim 11**, as discussed above, Pouyoul teaches that it would have been obvious to include a pinging process in Sneed. Sneed further discloses that the pinged peer declines to provide the payment processing service. As above, the system processing the payment in Sneed determines whether the user's credit card is approved

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(paragraphs 0031-0034), for the purpose of preventing fraud and ensuring a valid transaction.

33. **Regarding claim 12**, Pouyoul further discloses attempting by the pinged peer to locate an alternate peer likely to provide the payment processing service (column 37, lines 4-51).

34. **Regarding claim 13**, Pouyoul further discloses that the pinged peer, if successful in locating the alternate peer, responds to the pinging by providing a route to the alternate peer (column 37, lines 4-51).

35. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sneed in view of Leib, et al. (US Patent No. 6,772,048).

36. **Regarding claim 18**, Sneed teaches the limitations of claim 1, as discussed above. However, Sneed does not explicitly disclose that the system may include a vending machine. Leib, in an analogous art, teaches a vending machine system wherein vending machines are networked together to define a peer-to-peer network for the purpose of providing a system that is payment system that is highly flexible and versatile, yet relatively inexpensive to create (column 5, lines 1-55 and column 6, lines 40-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sneed to include vending machines in the

network in order to providing a payment system that is highly flexible and versatile, yet relatively inexpensive to create, for multiple goods and services, as taught by Leibniz.

37. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneed in view of Official Notice.

38. **Regarding claim 22**, Sneed teaches the limitations of claim 21, as discussed above. In particular, Sneed discloses the use of a security protocols in financial transaction (paragraph 0031). However, Sneed does not expressly teach that the security process may be an authentication process. The Examiner takes Official Notice that it was old and well-known in the art at the time the invention was made to require an authentication process during a financial transaction, such as the entry of a personal identification number (PIN) or biometric data, for the purpose of preventing fraud and unauthorized use of credit and debit cards. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sneed to require the user to submit to an authentication process when paying by credit card to prevent fraud and unauthorized use of the card, as was old and well-known in the art.

39. **Regarding claim 23**, Sneed teaches the limitations of claim 21, as discussed above. In particular, Sneed discloses the use of a security protocols in financial transaction (paragraph 0031). However, Sneed does not expressly teach that the security protocol may be a secure data tunnel. The Examiner takes Official Notice that it was old and well-known in the art at the time the invention was made to utilize a

secure data tunnel, such as a virtual private network (VPN) or secure shell (SSH) tunnel, when transmitting sensitive data, such as data associated with a financial transaction, through an unsecured network for the purpose of preventing unauthorized interception and use of the data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sneed to transmit financial data through the network using a secure data tunnel when paying by credit card in order to prevent unauthorized interception and use of the data, as was old and well-known in the art.

Conclusion

40. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Gaddis, et al. (US Patent Application Publication No. 2005/0201302) discloses an internet route deaggregation and route selection preferencing.
- Verbeke, et al. (US Patent Application Publication No. 2004/0098447) discloses a system and method for submitting and performing computational tasks in a distributed heterogeneous networked environment.
- Dailey (US Patent No. 5,642,350) discloses a peer to peer network for a mobile radio transceiver.
- Challenger (US Patent Application Publication No. 2003/0200162) discloses a secure peer-to-peer money transfer.
- Fisher, et al. (US Patent Application Publication No. 2003/0126094) discloses a persistent dynamic payment service.

- Guthrie, et al. (US Patent Application Publication No. 2002/0052841) discloses an electronic payment system.
- Ramanathan, et al. (US Patent No. 7,174,382) discloses an interest-based connections in peer-to-peer networks.
- Mandy (US Patent Application Publication No. 2005/0104723) discloses a method for monitoring a parking lot with meters and corresponding parking meters.
- Kibria, et al. (US Patent Application Publication No. 2003/0179107) discloses a smart parking meter system.
- Jinno (Japanese Application Publication No. JP 2001202544 A) discloses a centralized monitoring system for parking meter, uses cables or wireless transmission for transmitting collected information to monitoring center.
- Admasu, et al. (US Patent Application Publication No. 2002/0032601) discloses an electronic payment parking lot system and method.
- Arora (US Patent Application Publication No. 2004/0064568) discloses a presence detection using distributed indexes in peer-to-peer networks.
- Bowman (US Patent Application Publication No. 2003/0208621) discloses a path optimizer for peer to peer networks.
- Harrisville-Wolff (US Patent Application Publication No. 2003/0196148) discloses a system and method for peer-to-peer monitoring within a network.
- Traversat, et al. (US Patent Application Publication No. 2002/0184311) discloses a peer-to-peer network computing platform.
- Marmor, et al. (US Patent Application Publication No. 2002/0062310) discloses a peer-to-peer commerce system.

- Strickler, et al. (US Patent No. 6,122,630) discloses a bidirectional database replication scheme for controlling ping-ponging.

- Amirpanahi (US Patent No. 5,648,906) discloses a networked computerized parking system of networked computerized parking meters and a method of operating said system.

- Howard, et al. (US Patent No. 6,885,311) discloses a parking management system.

- Freeny, Jr. (US Patent No. 6,490,443) discloses a communication and proximity authorization system

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bradley Wright whose telephone number is (571)272-5872. The examiner can normally be reached on M - F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/jbw/

/James P Trammell/
Supervisory Patent Examiner, Art Unit 3694